

too often appear in the herbarium as colorless blobs. Both shape and color can be preserved by pressing individual flowers on an acetate sheet. The flower may be laid on a sheet of convenient size, or the corollas may be removed and laid out flat. After ordinary pressing, a quick wash with acetone fastens the dried flower to the acetate. The writer has not tried this on *Iris* but is confident that it would produce excellent preparations.

Millimeter scale. Lines a millimeter apart, scratched on a piece of cellulose acetate, produce a ruler that can be laid over the object to be measured. This type of rule is especially useful when close measurements are to be made under the binocular microscope. A machinist can engrave such lines down to 0.2 mm. apart.—DEPARTMENT OF BOTANY, UNIVERSITY OF WISCONSIN.

THE EFFECT OF FORCED AERATION ON THE LONGEVITY OF LAMINARIA¹.—For some time investigators have been desirous of keeping Laminaria and other large marine algae alive in the laboratory for periods of several weeks. This desire, however, has been met with little or no success. In ordinary running sea water in the laboratory, the tissue of Laminaria and many other marine algae begins to slough off progressively within a few days. Usually after one week the plant is of no use.

The writer, while investigating epiphytism among marine algae, found it necessary to keep Laminaria alive in the laboratory for periods of several weeks. Some consideration of the problem revealed that species of Laminaria had been kept alive in the laboratory over a longer period of time by the addition of orange juice to sea water. In this report, however, it was not pointed out what elements of the orange juice were responsible for the longevity of Laminaria in the laboratory. The writer thought this method a little too expensive; therefore it was not tried.

Laminaria collected around Woods Hole, Massachusetts, is usually found attached to rocks or other substrates in areas where water is in rapid motion. As the result of this rapid motion, large amounts of gases are collected from the atmosphere. The writer felt that the difficulty in keeping Laminaria alive in the

¹ Paper presented at Marine Biological Laboratory, Woods Hole, Massachusetts.

laboratory might be overcome by more satisfactorily duplicating the natural environment of the plant.

With this in mind a $\frac{1}{16}$ inch hole was drilled in the nozzle of a salt water faucet. This hole was drilled in a downward direction at an angle of about 22.5 degrees. To the faucet was attached a rubber tube which extended to the bottom of a 4,000 ml. beaker. The holdfasts of recently collected Laminaria were loosely but securely tied to rocks and placed in the beaker. The water was then allowed to run at full force throughout the experiment. Weekly cleaning of the beaker insured the maximum amount of light and periodic cleaning of faucets insured the maximum amount of force to produce aerated water movements. Air drawn in through the hole in the nozzle produced foam similar to that often observed in the natural environment of Laminaria. Air was drawn in with a much greater force through the hole in the nozzle than through hole in rubber tube; therefore the hole in the nozzle gave more desirable results.

During the summer of 1950, *Laminaria Agardhii* Kjellman was kept alive under the previously described conditions for a period of ten weeks with a minimum amount of sloughing off. A small amount of sloughing off could be expected since this normally takes place under natural environmental conditions as the plant grows older. At the end of ten weeks these plants were dried and they are now in the herbarium of the writer. This experiment was repeated for six weeks during the summer of 1951 and the results closely approximated that of 1950.—JOHN W. KING, MORGAN STATE COLLEGE, BALTIMORE, MARYLAND.

A FURTHER NOTE ON THE PLANTS OF VINLAND THE GOOD.—In reference to the interesting article on "The Identity of Vinber and Vinland," by Jacques Rousseau in RHODORA 53: 244, 245, 1951, it may be of interest to call attention to the publication on Newfoundland-Labrador by V. Tanner, issued by the Cambridge University Press in 1947. On page 43 of the first volume, Tanner has a great deal to say about the early explorations in Labrador, particularly about the Norse discoveries, and his map shows the locations of the various Norse localities as understood by him. According to Tanner, "mark" was old Norse for "wood" and referred to wooded parts of the Atlantic Coast of Labrador.